

Date: Thursday, 13/12/2007 10:34:18 AM
 User: Linda Lacelle

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services
Job Number : 32454
Estimate Number : 10802
P.O. Number : N/A
This Issue : 13/12/2007 **S.O. No.** : N/A
Prsht Rev. : NC
First Issue : 23/05/2007 **Type** : LANDING GEAR
Previous Run : 32453
Written By : _____
Checked & Approved By : _____
Comment : Est Rev:B 05-10-27 Revised pick list KJ/EC
 Est Rev:C 07-02-23 As per IIN D206-642 Rev K JLM

Drawing Name : FLOAT SKIDTUBE RH 206A/B
Part Number : D206642612
Drawing Number : IIN D206-642 REV K
Project Number : N/A
Drawing Revision : 'K'
Material : N/A
Due Date : 15/06/2007 **Qty:** 1 **Um:** Each

Additional Product

Job Number:



Seq. #: **Machine Or Operation:** **Description :**

1.0 DC DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D206-642-612 CHG003

08/01/08

2.0 32454A FLOAT SKIDTUBE HIGH GEAR 206 A/B - UNDER REVIEW



32454A SP



Comment: Sub-Component FLOAT SKIDTUBE HIGH GEAR 206 A/B - UNDER REVIEW

3.0 D206651041 206 A/B GHW Kit



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

1 D206651041 GHW Kit Batch: 1530235 SP

4.0 D26652 Saddle, RH, Fwd,Aft, Out



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 D2665-2 Saddle 32623 SP

5.0 D26662 Saddle, RH, Fwd,Aft, In



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 D2666-2 Saddle 32625

7/12/13 SP (X)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 13/12/2007 10:34:18 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE RH 206A/B

Job Number: 32454

Part Number: D206642612

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

D2652

Bushing



Comment: Qty.: 16.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick:

Qty Part Number Description Batch

16 D2652

Bushing

1535629

SP

7.0

D2712

Set Screw



Comment: Qty.: 10.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number Description Batch

10 D2712 Set Screw

1534628

SP

8.0

D2884

Saddle Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 D2884 Saddle Spacer

1535497

SP

9.0

D2885

Saddle Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 D2885 Saddle Spacer

1534782

SP

10.0

D33963

Inventory



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 D3396-3 Spacer

1534741

1/12/13 SO (IX)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 13/12/2007 10:34:18 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE RH 206A/B

Job Number: 32454

Part Number: D206642612

Job Number:



Seq. #: Machine Or Operation: Description :

11.0

AN3C36A

BOLT



Comment: Qty.: 6.0000 Each(s)/Unit Total : 6.0000 Each(s)

Pick:

Qty Part Number Description Batch

6 AN3C36A Bolt M106277 SP

M106541

12.0

MS21250 03004

HIGH STEEL BOLT



Comment: Qty.: 6.0000 Each(s)/Unit Total : 6.0000 Each(s)

HIGH STEEL BOLT

batch M106277 SP

13.0

D36721

PHENOLIC WASHER



Comment: Qty.: 18.0000 Each(s)/Unit Total : 18.0000 Each(s)

PHENOLIC WASHER

batch AB4470 SP

14.0

AN4C6A

Bolt



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

Pick:

Qty Part Number Description Batch

12 AN4C6A Bolt M105426 SP

15.0

AN5C7A

BOLT



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number Description Batc

4 AN5C7A Bolt M19185 SP

16.0

AN5C11A



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number Description Batch

4 AN5C11A Bolt M105634 SP

7/12/13 SP (2)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 13/12/2007 10:34:18 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE RH 206A/B

Job Number: 32454

Part Number: D206642612

Job Number:



Seq. #:

Machine Or Operation:

Description :

17.0

AN5C32A



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number Description Batch

4 AN5C32A Bolt M105156

SO

18.0

AN5C35A



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batc

1 AN5C35A Bolt M18918

SO

19.0

AN5C13A



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

bolt

batch M104999

SO

20.0

AN6C44A

BOLT



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batc

2 AN6C44A Bolt M106519

SO

21.0

AN3C41A

BOLT



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

BOLT

batch M105858

SO

22.0

AN960C10L

washer



Comment: Qty.: 30.0000 Each(s)/Unit Total : 30.0000 Each(s)

Pick:

Qty Part Number Description Batch

30 AN960C10L Washer M106302

7/12/13 SO (X)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 13/12/2007 10:34:18 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE RH 206A/B

Job Number: 32454

Part Number: D206642612

Job Number:



Seq. #:

Machine Or Operation:

Description :

23.0

AN960C416L

WASHER



Comment: Qty.: 24.0000 Each(s)/Unit Total : 24.0000 Each(s)

Pick:

Qty Part Number Description Batch

24 AN960C416L Washer

M104936

M105793 (R)
M100651 SQ

24.0

AN960C516L

WASHER



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick:

Qty Part Number Description Batch

8 AN960C516L Washer

M103344

90

25.0

AN960C616

WASHER



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number Description Batch

4 AN960C616 Bolt

M19185

SQ

26.0

MS210433

Nut



Comment: Qty.: 17.0000 Each(s)/Unit Total : 17.0000 Each(s)

Pick:

Qty Part Number Description Batch

17 MS21043-3Nut

M105792

SQ

27.0

MS210434

Nut



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

Pick:

Qty Part Number Description Batch

12 MS21043-4Nut

M105793

7/12/13 SQ (1x)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D206-642-612 PAR #: N/A Fault Category: Prod/Packaging NCR: (Yes) No DQA: D Date: 08/01/09
 QA: N/C Closed: HA Date: 08/01/09

NCR: <u>32454</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>08/01/09</u>	<u>#24.</u>	<u>No Batch # or no Part number written on Parts Bag</u> <u>P.C. Human error</u>	<u>[Signature]</u> <u>05/11/12</u>	<u>write correct batch #'s and correct part numbers</u>	<u>[Signature]</u>	<u>[Signature]</u> <u>08/01/09</u>	<u>[Signature]</u> <u>05/11/12</u>	<u>[Signature]</u> <u>08/01/09</u>

NOTE: Date & initial all entries

Date: Thursday, 13/12/2007 10:34:18 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE RH 206A/B

Job Number: 32454

Part Number: D206642612

Job Number:



Seq. #:

Machine Or Operation:

Description :

28.0

MS210435

Nut



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number Description Batch

4 MS21043-5 Nut M105430 SP

29.0

MS210436

NUT



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 ms21043-6 Nut M103693 SP

30.0

AN960JD10

Washer



Comment: Qty.: 6.0000 Each(s)/Unit Total : 6.0000 Each(s)

Washer

batch M105792 SP

31.0

D36831

INSERT



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

INSERT

batch B36319 AS 08/01/08 SP

32.0

D36727

PHENOLIC WASHER



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

PHENOLIC WASHER

batch M35522 SP

33.0

D36725

PHENOLIC WASHER



Comment: Qty.: 16.0000 Each(s)/Unit Total : 16.0000 Each(s)

PHENOLIC WASHER

batch M35521 SP

7/12/13

SP

(12)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 13/12/2007 10:34:19 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE RH 206A/B

Job Number: 32454

Part Number: D206642612

Job Number:



Seq. #:

Machine Or Operation:

Description :

34.0

D36723

PHENOLIC WASHER



Comment: Qty.: 24.0000 Each(s)/Unit Total: 24.0000 Each(s)

PHENOLIC WASHER

batch M34471

7/12/08 SD (1x)

35.0

MS27039C105

SCREW



Comment: Qty.: 12.0000 Each(s)/Unit Total: 12.0000 Each(s)

SCREW

batch M106524

7/12/08 SD (1x)

36.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

08/01/09 (1x)

37.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D206-642-612

Location:

PPP Rev:

C. J. 08/01/09 (1x)

38.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/01/09 (1x)

Job Completion



08.01.09

B32454A

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 5/23/2007 3:22:17 PM
User: Kim Johnston

Process Sheet

24

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : FLOAT SKIDTUBE HIGH GEAR 206 A/B UNDER REVIEW
Job Number : 32454A	
Estimate Number : 10803	
P.O. Number : N/A	Part Number : D206642641
This Issue : 5/23/2007	Drawing Number : D3288 REV C
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A	Drawing Revision : C
Previous Run : 32453A	Material : N/A
Written By : <u>[Signature]</u>	Due Date : 6/15/2007
Checked & Approved By : <u>[Signature]</u>	Qty: 1 Um: Each
Comment : Est Rev:B 05.11.15 Added washers for aft cap, wearshoes and ring EC Est Rev:C 06-05-31 Revised steps JLM Est Rev:D 07-02-22 Added SS Wearplates & Gaskets JLM	



Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	DC	DOCUMENT CONTROL
-----	----	------------------



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D206-642-641 CHG002

2.0	D2620	Bent 206 Skidtube
-----	-------	-------------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
-----	-------------	-------------	-------

1	D2620	3" OD Bent Tube	
---	-------	-----------------	--

B33879 DP 7-8-15

3.0	D2647	Cap
-----	-------	-----



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
-----	-------------	-------------	-------

1	D2647	Fwd Cap	
---	-------	---------	--

B29328 DE 7-8-16

4.0	D32861	Doubler
-----	--------	---------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
-----	-------------	-------------	-------

2	D3286-1	Doubler	
---	---------	---------	--

B32514 (2) 7-12-10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries.

Date: Wednesday, 5/23/2007 3:22:17 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE HIGH GEAR 206 A/B - UNDER REVIEW

Job Number: 32454A

Part Number: D206642641

Job Number:



Seq. #:

Machine Or Operation:

Description:

5.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Deburr FWD edge of tube, grind bending marks.

2-Remove ridge on inside of fwd edge of tube as per Dwg D3288.

3-Weld Fwd Cap as per Dwg D3288, Grind to obtain proper fit

A/R AL ROD

Batch:

~~D29328~~
m104907/m104221

4-Grind welds flush to cap on top surface only.

5-Cut Aft end as per Dwg D3288 from front of tube then deburr

6-Remove inner indexing ridge on aft end as per Dwg d3288

7-Open holes for aft cap as per Dwg D3288 using Dt8025

8-Drill pilot holes using DT8818

9-Insert D3286-1 doubler using DT8732 & DT8879, then locating doubler off the D3286-1 doubler, leave Dt8732 for added support

3/16" holes cleco

10-Drill D3286-1 doubler rivet holes in tube using #40 drill, spot drilling doubler at the same time.

11-Working from center out, drill #30 holes into D3286-1 Doubler. cleco each hole after its drilled, Verify angle of holes to accomodate rivet heads.

12-Remove 3/16" clecos only and open GHW holes to .500" as per Dwg D3288.

13-Remove D3286-1 doubler, identify orientation, deburr then attach to W/O

14-Remove indexing edge as per Dwg D3288.

15-C'sink rivet holes as per Dwg D3288.

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

07/12/12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 5/23/2007 3:22:17 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE HIGH GEAR 206 A/B - UNDER REVIEW

Job Number: 32454A

Part Number: D206642641

Job Number:



Seq. #:

Machine Or Operation:

Description:

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



AWM



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

07-12-13

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



DP



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

2-12-13

9.0

CR3212404

Cherry Rivet



Comment: Qty.: 52.0000 Each(s)/Unit Total: 52.0000 Each(s)

Pick:

Qty Part Number

Description Batch

52 CR3212-4-04

Rivet

M106 2TB

(54)

W 7-12-14

10.0

D3289041

Float Web (206A/B)



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3289-041 Float Web

B36187

(1)

W 7-12-14

11.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open Holes to finished size as per DWg D3288. Deburr.

2-Locate, install and rivet doublers as per Dwg D3288. Micro-shave rivets as required.

3-Bond web in place as per Dwg D3288 & QSI 015.

A/R Sikaflex-291

M 105488

Sikaflex expire date:

2-7-1

Start: 7-12-14

Time: 8:40am

Finish: 12/17

Time: 7:40am

(Adhere for 12 hours)

W 7-12-14

12.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

6 12/17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 5/23/2007 3:22:17 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE HIGH GEAR 206 A/B - UNDER REVIEW

Job Number: 32454A

Part Number: D206642641

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

13.0	BENDING	BENDING MACHINE
------	---------	-----------------



Comment: BENDING MACHINE

Bend tube using program D3288 as per Dwg D3288. Install drop pins in cross bolt spacer holes to maintain web position.

EL/SD 7-12-18

14.0	LANDING GEAR 1	LANDING GEAR RESOURCE 1
------	----------------	-------------------------



Comment: LANDING GEAR RESOURCE 1

1-Drill pilot holes for wearplates using D3288-T2 as per Dwg D3288, then open to Ø0.297". (without cutting fluid)

DEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES)

2-C'sink X-bolt holes.

3-Deburr

K
7-12-18

15.0	D2649	Crossbolt Spacer
------	-------	------------------



Comment: Qty.: 9.0000 Each(s)/Unit Total : 9.0000 Each(s)

Pick:

Qty Part Number Description Batch

9 D2649 Crossbolt spacer

B34508

BE 07-12-19

16.0	D32751	Crossbolt Spacer
------	--------	------------------



Comment: Qty.: 9.0000 Each(s)/Unit Total : 9.0000 Each(s)

Pick:

Qty Part Number Description Batch

9 D3275-1 Crossbolt spacer

B34619

BE 07-12-19

17.0	D32863	Spacer
------	--------	--------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 D3286-3 Spacer

B35048

BE 07-12-20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 5/23/2007 3:22:17 PM

User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE HIGH GEAR 206 A/B - UNDER REVIEW

Job Number: 32454A

Part Number: D206642641

Job Number:



Seq. #:

Machine Or Operation:

Description:

18.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Insert D2649 & D3275-1 crossbolt spacers. Weld as per QSI 004 and Dwg D3288. Remember to back drill each hole before welding the other side. Use aluminum rod.

A/R Aluminum Rod

m10538 BE 07/12/19

2-Using DT8733, insert (2) D3286-3 spacers as per QSI 004 and Dwg D3288. Remember to back drill each hole to Ø0.402" before welding other side. Use SS rod as required.

A/RSS Rod

NONE BE 07/12/20

3-Grind welds flush to Fwd cap on top surface only.

u 7-12-20

4-Grind cross bolt welds flush as per Dwg D3288. Masking Tape access to inside of the skidtube

5-Counterbore 5/16" x 0.750" deep using DT8747, except 8th cross bolt hole from Aft end, as per Dwg D3288.

7-12-20

19.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

D 07-12-20

20.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

07/12/20 (X)

21.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

*m-h**08/01/02*

Pressure wash as per QSI 005

(1X)

22.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

*FL**08/01/02*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 5/23/2007 3:22:17 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE HIGH GEAR 206 A/B - UNDER REVIEW

Job Number: 32454A

Part Number: D206642641

Job Number:



Seq. #:

Machine Or Operation:

Description :

23.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



HL



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

08-01-03

(X1)

24.0

D3415041

Nut Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3415-041 Nut Plate B 33842

HL

25.0

CCR264SS33

Cherry Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 CCR264SS3-3 Rivet M 103525

HL

26.0

CR3212403

Cherry Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 CR3212-4-03 Rivet M 15918

HL

27.0

ALS71032130

Insert



Comment: Qty.: 64.0000 Each(s)/Unit Total : 64.0000 Each(s)

Insert

Batch: M 105729

* HL

28.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install D3415-041 Nut Plate as per Dwg D3288 ,Install with LPS-3

A/R LPS-3 Batch: M 105005

2-Install inserts Dwg D3288. Use a drop of Sikaflex inside insert holes

A/R Sikaflex-291 M 105585

HL 08-01-03 (X1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 5/23/2007 3:22:17 PM

User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE HIGH GEAR 206 A/B - UNDER REVIEW

Job Number: 32454A

Part Number: D206642641

Job Number:



Seq. #:

Machine Or Operation:

Description:

Sikaflex expire date: 08-07

HJ

08-01-03

XU

29.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Inserts & Nut plate

5 08/01/03 (XU)

30.0

D353515

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

WEARSHOE

Batch: B34624

HJ

31.0

D353521

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

WEARSHOE

Batch: B31991

HJ

32.0

D353535

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

WEARSHOE

Batch: B34883

HJ

33.0

D353541

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

WEARSHOE

Batch: B31993

HJ

34.0

D353615

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

GASKET

Batch: B33964

HJ

35.0

D353621

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

GASKET

B31995

HJ

08-01-03

(X1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 5/23/2007 3:22:18 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE HIGH GEAR 206 A/B - UNDER REVIEW

Job Number: 32454A

Part Number: D206642641

Job Number:



Seq. #:

Machine Or Operation:

Description :

36.0

D353635

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: 1336017

JS

37.0

D353641

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: BB1997

JS

38.0

D35371

WEARPAD



Comment: Qty.: 7.0000 Each(s)/Unit Total : 7.0000 Each(s)

WEARPAD

Batch: B36040

JS

39.0

D35373

WEARPAD



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARPAD

Batch: B33285

JS

40.0

AN3C4A

BOLT



Comment: Qty.: 66.0000 Each(s)/Unit Total : 66.0000 Each(s)

BOLT

Batch: M106277

JS

41.0

NAS1515H3L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch
2 NAS1515H3L Washer M105116

JS

42.0

AN960C10L

washer



Comment: Qty.: 64.0000 Each(s)/Unit Total : 64.0000 Each(s)

Pick:

Qty Part Number Description Batch
M106574

JS

08-01-03

(X)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 5/23/2007 3:22:18 PM

User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE HIGH GEAR 206 A/B - UNDER REVIEW

Job Number: 32454A

Part Number: D206642641

Job Number:



Seq. #:

Machine Or Operation:

Description :

64 AN960C10L Washer

43.0

D34131

Ring



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3413-1 Ring B33949

SA

44.0

AN4C5A

BOLT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 AN4C5A Bolt M118918

HA

45.0

AN960JD416

Washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

~~1 AN960JD416 Washer M1105426~~

~~AA960JD416~~

*

JS

46.0

D2646

Aft Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2646 Aft Cap B332427

HA

47.0

AN960C10L

washer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)




Pick:


Qty Part Number Description Batch

2 AN960C10L Washer M106574

* HA

08-03-03 (X1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
08/01/03		change estant to match Part Lst. AN960SD416 to AN960C416 washer					 08/01/03

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA:  Date: 08/01/03
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 5/23/2007 3:22:18 PM

User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE HIGH GEAR 206 A/B - UNDER REVIEW

Job Number: 32454A

Part Number: D206642641

Job Number:



PTO =>

Seq. #:

Machine Or Operation:

Description:

48.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

2-Install wearshoes/wearpads & Gaskets as per Dwg D3288.

3-Install Ring on Nut Plate as per detail F & Dwg D3288.

4-Spray inside tube with LPS-3 on both sides of web M105005

5-Install D2646 Aft Cap and seal with Sikaflex. Clean excess adhesive.

A/R Sikaflex-291 M105585

Sikaflex expire date: 08-07

6-Coat all exposed fastners with LPS Procyon, remove any excess on powder coat with MEK Degreasser.

A/R LPS Procyon Batch: M104251

9/2 08-01-03 (XL)

49.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

5 006104 (4)

50.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D206-642-641

Location: _____

PPP Rev: _____

PPP 32454 8/01/08 (1)

51.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

D 08/01/08

Job Completion



POSITIVE RECALL

ELECTIVE 07/12/14


AUTH

RELEASE 08-01-04

DATE

08-01-04

08-01-04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
08-01-03	47.1	- INSTAL 12 INSERTS - D36831 - B 36319 - INSTAL 12 SCREWS - M27039C1 - 05 M106574 - INSTAL 12 WASHERS - ANC960575 M106574	JH	08-01-03	X12 X12 X12		 08/01/04

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN CP	DRAWN BY PH	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED H	APPROVED H	DRAWING NO. D3288	REV. C SHEET 1 OF 3
DATE 06.12.19		TITLE SKIDTUBE ASSEMBLY	SCALE NTS
A	04.05.17	NEW ISSUE	
B	05.03.16	CHANGE INSERTS	
C	06.12.19	NEW INSERTS, SS WEARSHOE + GASKET	

RELEASED07.02.12 **H**

Qty -041	Part Number	Description
X	D3288-041	SKIDTUBE ASSEMBLY
1	D2600-1-240	EXTRUSION
1	D2647	CAP
1	D2646	AFT CAP
9	D2649	CROSS BOLT SPACER
9	D3275-1	CROSS BOLT SPACER
2	D3286-1	DOUBLER
2	D3286-3	SPACER
1	D3289-041	FLOAT WEB
1	D3413-1	RING
1	D3415-041	NUT PLATE
1	D3535-15	WEARSHOE
1	D3535-21	WEARSHOE
1	D3535-35	WEARSHOE
1	D3535-41	WEARSHOE
1	D3536-15	GASKET
1	D3536-21	GASKET
1	D3536-35	GASKET
1	D3536-41	GASKET
7	D3537-1	WEARPAD
1	D3537-3	WEARPAD
64	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
66	AN3C4A	BOLT
1	AN4C5A	BOLT
1	AN960C416	WASHER
66	AN960C10L	WASHER
2	CCR264SS3-3	RIVET
2	CR3212-4-03	RIVET
52	CR3212-4-04	RIVET
2	NAS1515H3L	WASHER

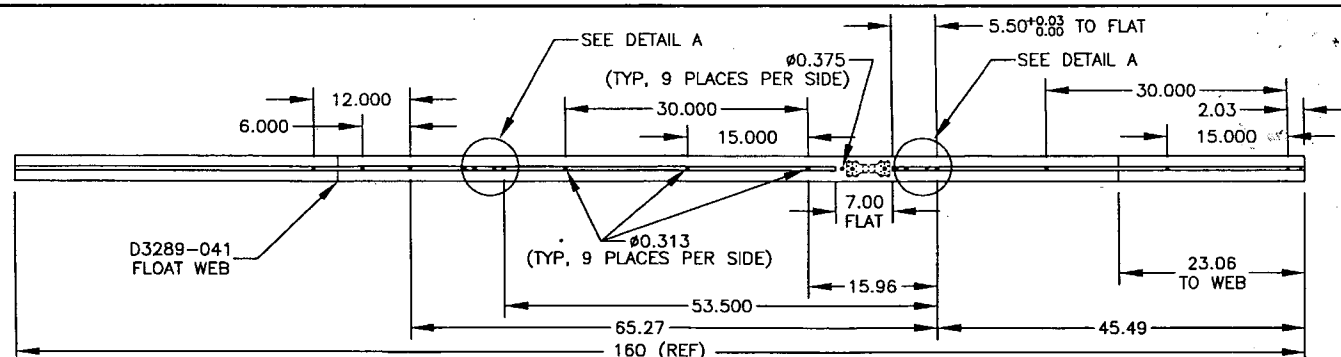
GENERAL NOTES:

1. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
2. DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 6 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
3. ALL HOLES DRILLED ON CENTERLINES.
4. BOND D3289-041 FLOAT WEB INTO D3288-1 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
5. WELDING TO BE DONE PER DART QSI 004.
6. FINISH:
 - ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1
 - POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
7. DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3288-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/-291.
8. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

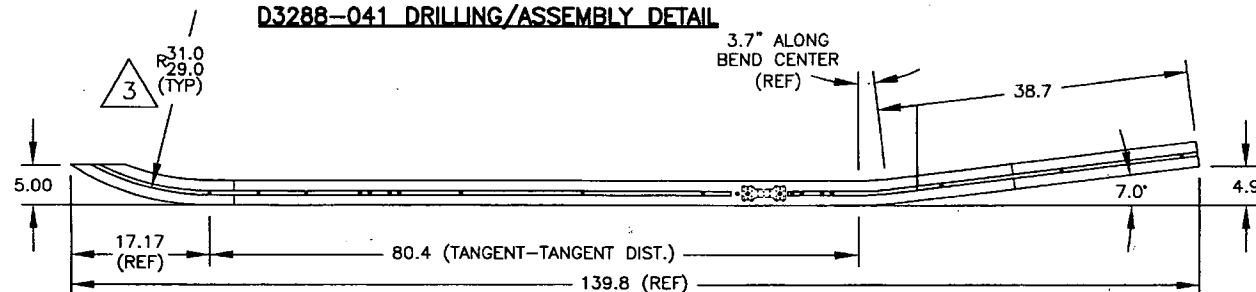
SHOP COPY
RETURN TO
ENGINEERING
UNLESS THE FILED COPY
IS SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO 32454A

Copyright © 2004 by DART AEROSPACE USA, INC.

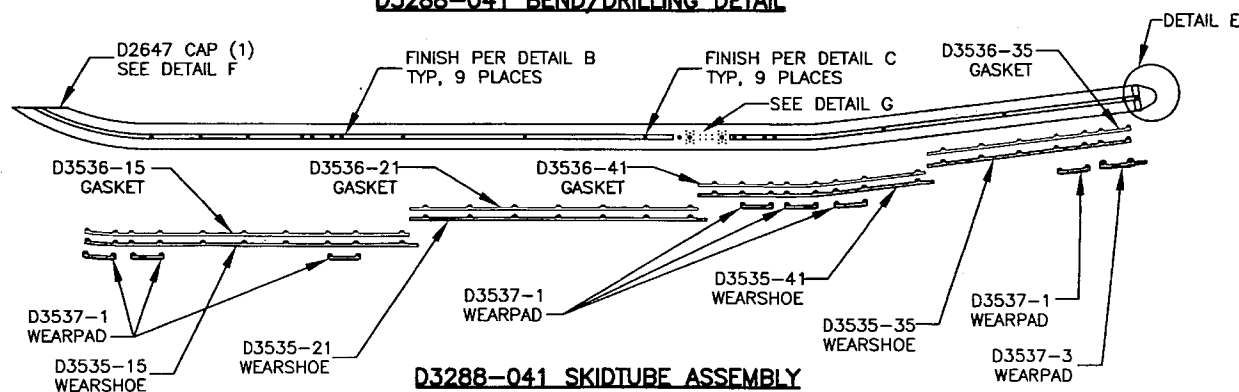
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.



D3288-041 DRILLING/ASSEMBLY DETAIL



D3288-041 BEND/DRILLING DETAIL



D3288-041 SKIDTUBE ASSEMBLY

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO 324644

RELEASED

07.02.12

COPYRIGHT © 2004 BY DART AEROSPACE USA, INC.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL
AND IS SUPPLIED ON THE EXPRESS CONDITION
THAT IT IS NOT TO BE USED FOR ANY PURPOSE
OR COPIED OR COMMUNICATED TO ANY OTHER
PERSON WITHOUT WRITTEN PERMISSION FROM
DART AEROSPACE USA, INC.

DESIGN

CP

DRAWN BY

PH

CHECKED

PH

APPROVED

PH

DATE

06.12.19

DART DART AEROSPACE USA, INC.
PORT HADLOCK, MA

DRAWING NO.

D3288

TITLE

SKIDTUBE ASSEMBLY

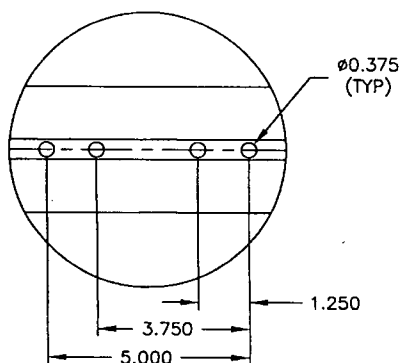
REV. C

SHEET 2 OF 3

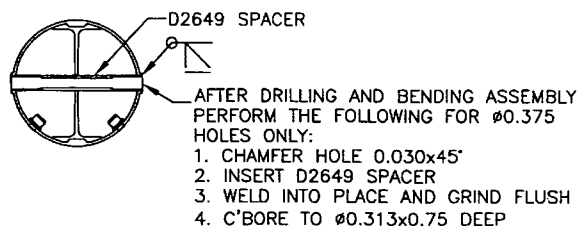
SCALE

1:15

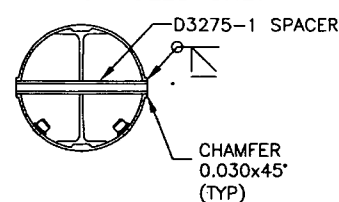
DETAIL A: DRILL DETAIL



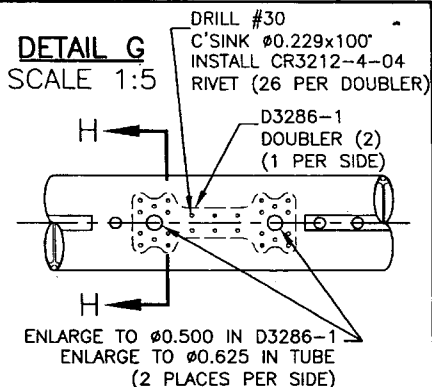
DETAIL B FOR 0.375 HOLES ONLY



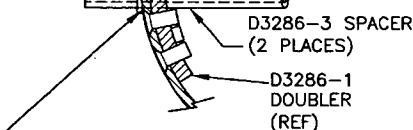
DETAIL C FOR 0.313 HOLES ONLY



DETAIL G SCALE 1:5

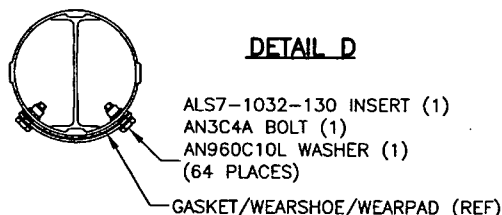


SECTION H-H NOT TO SCALE

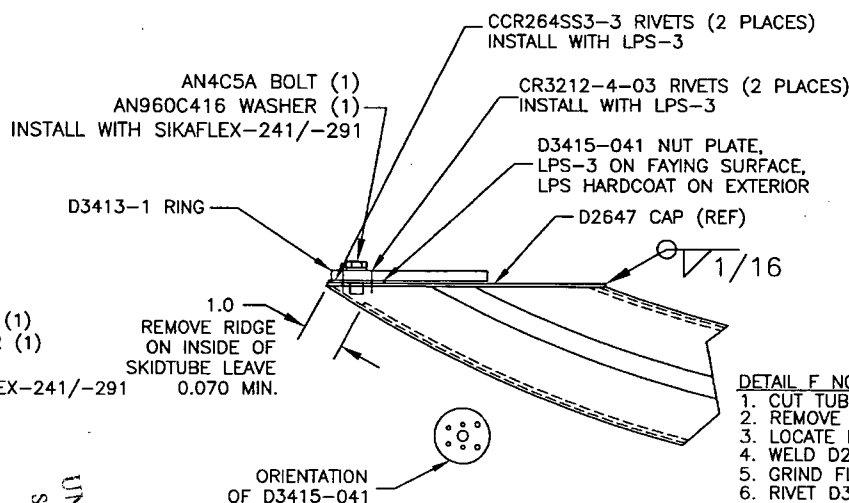


- TO INSTALL D3286-1/-3:
1. GRIND OFF FLANGE IN AREA SHOWN, FLUSH WITH ROUND TUBE
 2. LOCATE & DRILL D3286-1 DOUBLER USING DT3286-1T1
 3. ENLARGE HOLES IN D3286-1 TO 0.500
 4. ENLARGE HOLES IN TUBE TO 0.625
 5. RIVET D3286-1 TO TUBE
 6. INSERT D3286-3 SPACER
 7. WELD IN PLACE AND GRIND FLUSH

DETAIL D



DETAIL F: END FINISHING DETAIL

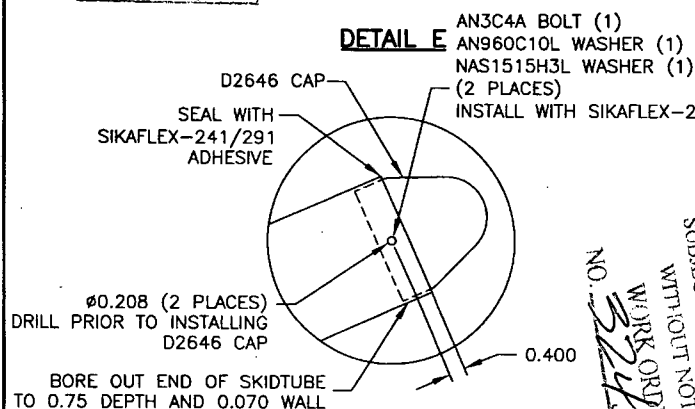


DETAIL F NOTES

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D2647 (TRIM AS NECESSARY)
4. WELD D2647 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D3415-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D3415-041 PRIOR TO FINISH

DETAIL E

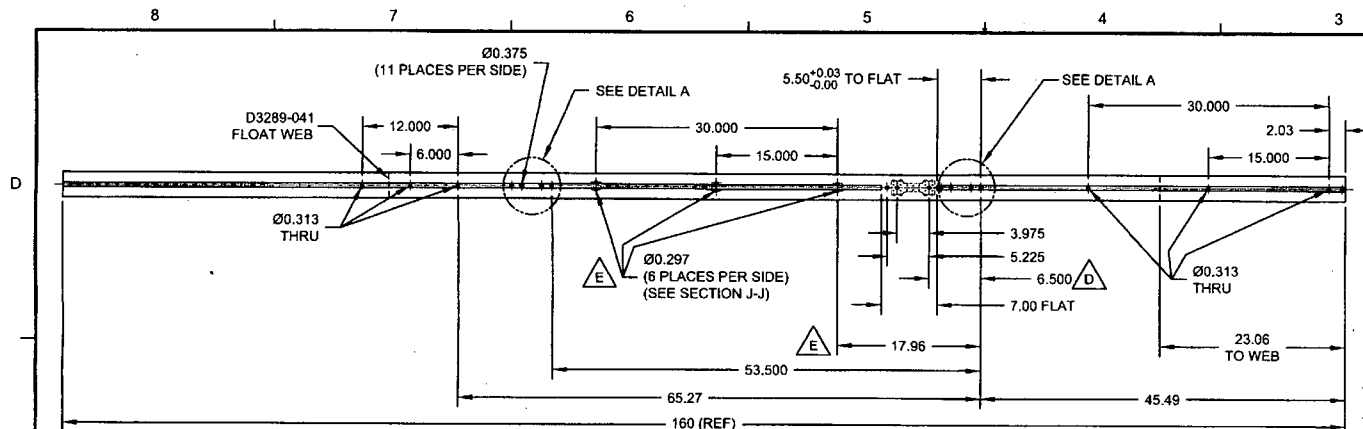


RELEASED

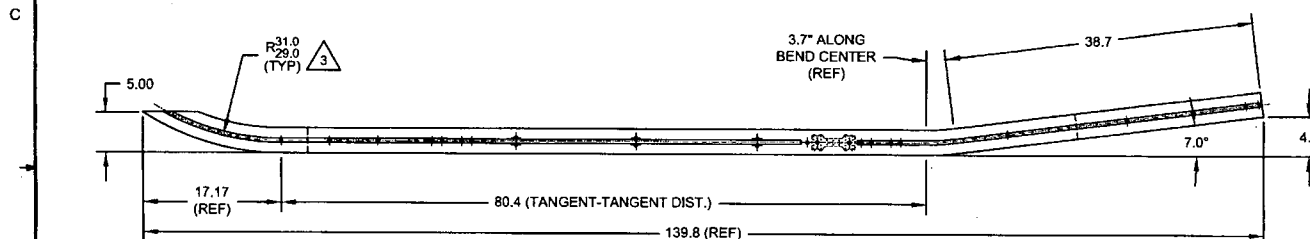
070212

NO. 3245 44
WORK ORDER
SUBJECT TO AMENDMENT
UNCONTROLLED COPY
ENGINEERING
RETURN TO
SHOP COPY

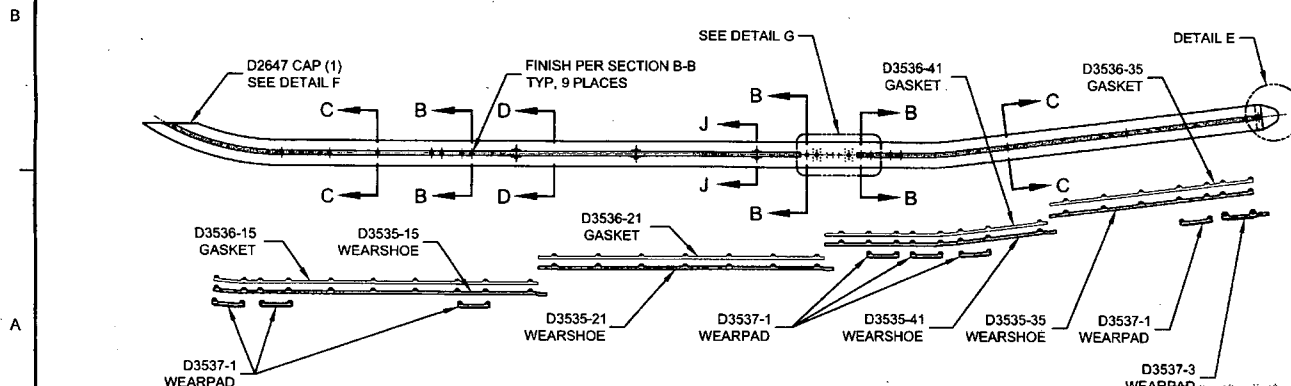
COPYRIGHT © 2004 BY DART AEROSPACE USA, INC.		DESIGN	CP	DRAWN BY	PH	DART DART AEROSPACE USA, INC. PORT HADLOCK, MA	REV. C
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.		CHECKED	#	APPROVED	#		
DATE		06.12.19		DRAWING NO.		D3288	SHEET 3 OF 3
TITLE		SKIDTUBE ASSEMBLY		SCALE			1:3



D3288-041 DRILLING/WEB ASSEMBLY DETAIL



D3288-041 BENDING DETAIL



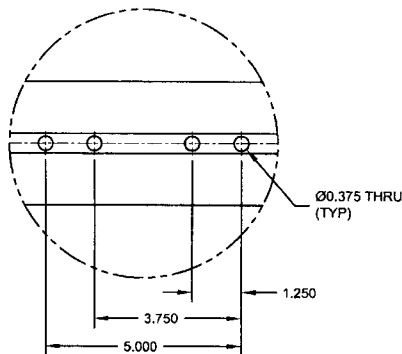
D3288-041 WELDING DETAIL/SKIDTUBE ASSEMBLY

Qty	Part Number	Description
1	D3288-041	SKIDTUBE ASSEMBLY
1	D2600-1-240	EXTRUSION
1	D2646	AFT CAP
1	D2647	CAP
9	D2549	CROSS BOLT SPACER
6	D3275-1	CROSS BOLT SPACER
2	D3286-1	DOUBLER
2	D3286-3	SPACER
1	D3289-041	FLOAT WEB
1	D3413-1	RING
1	D3415-041	NUT PLATE
1	D3535-15	WEARSHOE
1	D3535-21	WEARSHOE
1	D3535-35	WEARSHOE
1	D3535-41	WEARSHOE
1	D3536-15	GASKET
1	D3536-21	GASKET
1	D3536-35	GASKET
1	D3536-41	GASKET
7	D3537-1	WEARPAD
1	D3537-3	WEARPAD
12	D3683-1	INSERT
64	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
66	AN3CA4	BOLT
1	AN4CSA	BOLT
1	AN86CCA16	WASHER
78	AN86CC10L	WASHER
2	CCR284533-3	RIVET
2	CR3212-4-03	RIVET
52	CR3212-4-04	RIVET
12	MS27039C1-05	SCREW (or AN3CA BOLT)
2	NAS1515H3L	WASHER

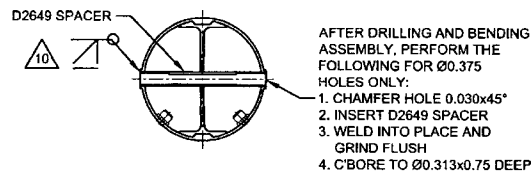
GENERAL NOTES:

- FINISH: - ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1
- POWDER COAT WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
- SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY. CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- BOND D3288-041 FLOAT WEB INTO D3288-1 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241281 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
- ALL HOLES DRILLED ON CENTERLINES.
- DRILL 0.0297 HOLES FOR D3683-1 INSERTS BEFORE FINISH. INSTALL D3683-1 INSERTS AFTER FINISH.
- DRILL 0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3288-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX-2411-281.
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED.
- UNITS: INCHES UNLESS OTHERWISE NOTED.
- WELDING: PER DART QSI 004.

F	SUBSTITUTE FLOAT BAG INSERT W/SPEC CTRL DWG WAS ALS7-1032-130; IS NOW D3683-1	DC	07.11.21
E	MID-FLOAT HOLES WERE MOVED 2.00" FWD AND ROTATED INBOARD AND OUTBOARD BY 17" INSERTS ARE NOW INSTALLED AT THESE LOCATIONS	MB	07.09.14
D	DIMENSIONS ADDED	DC	07.06.04
C	NEW INSERTS. SS WEARSHOES AND GASKETS	PH	06.12.19
B	CHANGE INSERTS	CP	05.03.18
A	NEW ISSUE	CP	04.05.17
REV.	DESCRIPTION	BY	DATE
DESIGN	9P		
DRAWN	DC		
CHECKED	DC		
MFG. APPR.	DC		
APPROVED	DC		
DE APPR.	DC		
DATE	07.11.21		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3288 TITLE SKIDTUBE ASSEMBLY COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

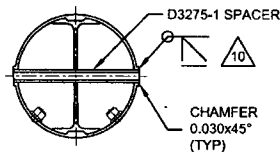


DETAIL A: DRILL DETAIL



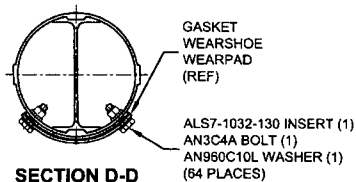
SECTION B-B

FOR Ø0.375 HOLES ONLY
(TYP, 9 PLACES)



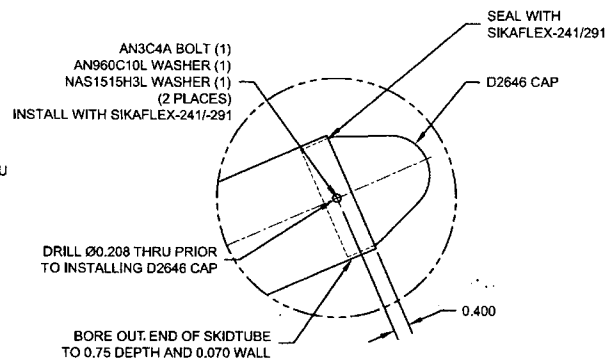
SECTION C-C

FOR Ø0.313 HOLES ONLY
(TYP, 6 PLACES)

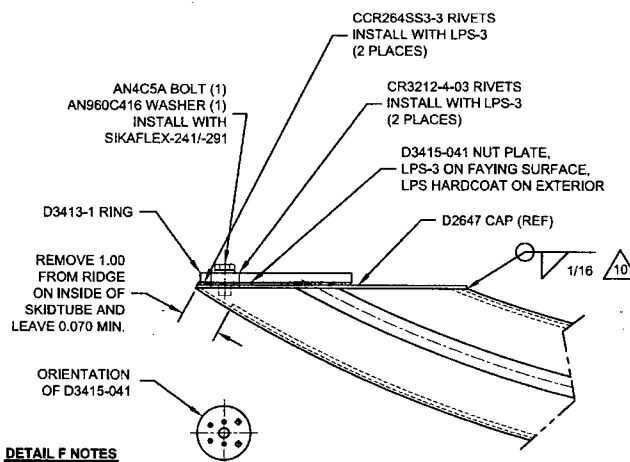


SECTION D-D

FOR WEARSHOES INSTALL ONLY
(TYP, 32 PLACES)



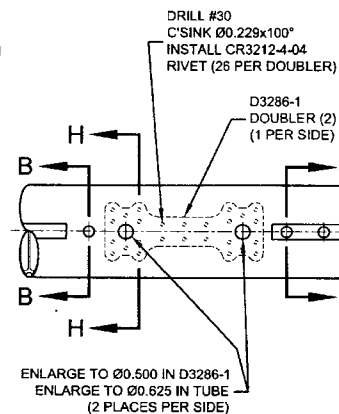
DETAIL E



DETAIL F NOTES

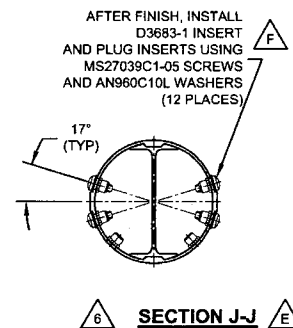
1. CUT TUBE LEVEL
 2. REMOVE RIDGE ON FWD SIDE
 3. LOCATE D2647 (TRIM AS NECESSARY)
 4. WELD D2647 IN PLACE PER DART QSI 004
 5. GRIND FLUSH
 6. RIVET D3415-041 NUT PLATE IN PLACE
- NOTE: MASK THREADS IN D3415-041 PRIOR TO FINISH

DETAIL F: END FINISHING DETAIL

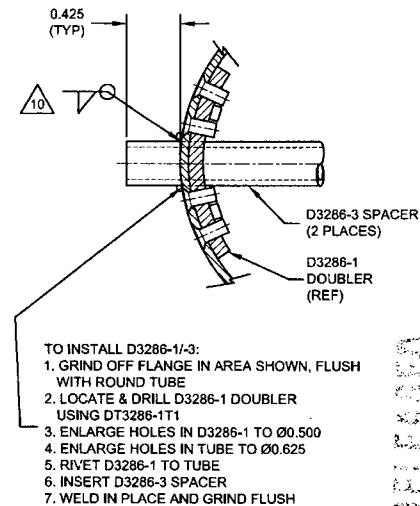


DETAIL G

SCALE 1:5



SECTION J-J



SECTION H-H

NOT TO SCALE

DESIGN	9	DART AEROSPACE LTD	
DRAWN	DC	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AS	DRAWING NO.	REV. F
MFG. APPR.	By	D3288	SHEET 2 OF 2
APPROVED	By	TITLE	SCALE
DE APPR.	By	SKIDTUBE ASSEMBLY	1:3
DATE	07.11.21	COPYRIGHT © 2004 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			



NO. 134

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name Barclay Elliot
Joint Welding Procedure E1
Part number and Job number D206412241 / B35155

TEST WELDS REQUIRED

BASE METAL Aluminium WELDING PROCESS E1
Penetration Complete ☒ Partial ☐ Single Weld ☒ Double Weld ☐
Current AC ☒ DC ☐ Backing YES ☐ NO ☒

	Position	Vertical	Down <input type="checkbox"/>	Up <input type="checkbox"/>
Sheet Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	3G <input type="checkbox"/>	4G <input type="checkbox"/>
Tube Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	5G <input type="checkbox"/>	6G <input type="checkbox"/>
Sheet Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	3F <input type="checkbox"/>	4F <input type="checkbox"/>
Tube Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	4F <input type="checkbox"/>	5F <input type="checkbox"/>

Crossbolt Spacer Welded into Skid tube

TEST RESULTS

Visual Pass ☒ Fail ☐
Penetration Pass ☒ Fail ☐
Crossbolt Spacer Pass ☒ Fail ☐

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Date of Test Coupon 07-12-04 Qualifier Det. Duval